

**CITY OF SAN DIEGO****MEMORANDUM**

DATE: October 16, 2008

TO: Council President Peters & City Council

FROM: Beryl Bailey Rayford, Equal Opportunity Contracting Program
Manager

SUBJECT: Award Bid Contract for Furnishing Cationic Polymer for Water
Treatment

This agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. 18173, Section 22.2701 through 22.2702) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517)

CC: Fischle-Faulk, Debra

000469DOCKET SUPPORTING INFORMATION
CITY OF SAN DIEGO

DATE:

October 16, 2008

330
03/10**EQUAL OPPORTUNITY CONTRACTING PROGRAM EVALUATION**

SUBJECT: Award Bid Contract for Furnishing Cationic Polymer for Water Treatment

GENERAL CONTRACT INFORMATION

Amount of this Action: \$3,909,340.52 (Not to Exceed)
Recommended Consultant: Polydyne, Inc.
Funding Source: City of San Diego

SUBCONSULTANT PARTICIPATION

No Subconsultant participation on this action.

EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE

Equal Opportunity Required

Polydyne, Inc. submitted a Work Force Report for their San Diego employees dated October 16, 2008 indicating 18 employees in the Administrative Work Force. The Administrative Work Force Analysis indicates under representations in the following categories:

Asian Operative Workers
Filipino in Operative Workers
Female in Sales and Operative Workers

Although the firm's workforce has under representations in Asians and Filipinos in Operative Workers, however the overall category exceeds the goal.

This agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. 18173, Section 22.2701 through 22.2702) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517)

ADDITIONAL COMMENTSThe *Work Force Analysis* is attached.
MM-J

000471

File: Admin WOFO 2000

Date WOFO Submitted: 10/16/2008
Input by: Lad

Goals reflect statistical labor force
availability for the following: 2000 CLFA
San Diego, CA

City of San Diego/Equal Opportunity Contracting
WORK FORCE ANALYSIS REPORT
FOR

Company: Polydyne Inc.

I. TOTAL WORK FORCE:

	Black			Hispanic			Asian			American Indian			Filipino			White			Other		
	CLFA Goals	M	F	CLFA Goals	M	F	CLFA Goals	M	F	CLFA Goals	M	F	CLFA Goals	M	F		M	F		M	F
Mgmt & Financial	3.3%	0	0	11.9%	1	0	6.2%	0	0	0.4%	0	0	6.2%	0	0		1	0		0	0
Professional	4.0%	0	0	12.6%	0	0	6.5%	0	0	0.5%	0	0	6.5%	0	0		0	0		0	0
A&E, Science, Computer	2.8%	0	0	7.3%	0	0	16.2%	0	0	0.3%	0	0	16.2%	0	0		0	0		0	0
Technical	6.6%	0	0	14.8%	0	0	17.2%	1	0	0.4%	0	0	17.2%	0	0		0	0		0	0
Sales	3.9%	0	0	19.5%	1	0	6.8%	0	0	0.6%	0	0	6.8%	0	0		2	0		0	0
Administrative Support	7.0%	0	0	20.8%	0	1	8.8%	0	0	0.6%	0	0	8.8%	0	0		0	1		0	0
Services	5.5%	0	0	36.9%	0	0	9.7%	0	0	0.6%	0	0	9.7%	0	0		0	0		0	0
Crafts	4.5%	0	0	25.8%	0	0	9.1%	0	0	0.7%	0	0	9.1%	0	0		0	0		0	0
Operative Workers	4.3%	0	0	38.8%	8	0	20.8%	0	0	0.3%	0	0	20.8%	0	0		2	0		0	0
Transportation	8.1%	0	0	32.1%	0	0	4.5%	0	0	0.5%	0	0	4.5%	0	0		0	0		0	0
Laborers	4.4%	0	0	54.0%	0	0	4.1%	0	0	0.5%	0	0	4.1%	0	0		0	0		0	0
TOTAL		0	0		10	1		1	0		0	0		0	0		5	1		0	0

HOW TO READ TOTAL WORK FORCE SECTION:

The information blocks in Section I (Total Work Force) identify the absolute number of the firm's employees. Each employee is listed in their respective ethnic/gender and employment category. The percentages listed under the heading of "CLFA Goals" are the County Labor Force Availability goals for each employment and ethnic/gender category.

Mgmt & Financial
Professional
A&E, Science, Computer
Technical
Sales
Administrative Support
Services
Crafts
Operative Workers
Transportation
Laborers

TOTAL EMPLOYEES		
ALL	M	F
2	2	0
0	0	0
0	0	0
1	1	0
3	3	0
2	0	2
0	0	0
0	0	0
10	10	0
0	0	0
0	0	0

Female
Goals
39.8%
59.5%
22.3%
49.0%
49.4%
73.2%
62.3%
8.6%
36.7%
15.2%
11.1%

HOW TO READ EMPLOYMENT ANALYSIS SECTION:

The percentages listed in the goals column are calculated by multiplying the CLFA goals by the number of employees in that job category. The number in that column represents the percentage of each protected group that should be employed by the firm to meet the CLFA goal. A negative number will be shown in the discrepancy column for each underrepresented goal of at least 1.00 position.

II. EMPLOYMENT ANALYSIS

TOTAL

	Black			Hispanic			Asian			American Indian			Filipino			Female		
	Goals	Actual	Discrepancy	Goals	Actual	Discrepancy	Goals	Actual	Discrepancy	Goals	Actual	Discrepancy	Goals	Actual	Discrepancy	Goals	Actual	Discrepancy
Mgmt & Financial	0.07	0	N/A	0.24	1	N/A	0.12	0	N/A	0.01	0	N/A	0.12	0	N/A	0.80	0	N/A
Professional	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
A&E, Science, Computer	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
Technical	0.07	0	N/A	0.15	0	N/A	0.17	1	N/A	0.00	0	N/A	0.17	0	N/A	0.49	0	N/A
Sales	0.12	0	N/A	0.59	1	N/A	0.20	0	N/A	0.02	0	N/A	0.20	0	N/A	1.48	0	(1.48)
Administrative Support	0.14	0	N/A	0.42	1	N/A	0.18	0	N/A	0.01	0	N/A	0.18	0	N/A	1.46	2	N/A
Services	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
Crafts	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
Operative Workers	0.43	0	N/A	3.88	8	4.12	2.08	0	(2.08)	0.03	0	N/A	2.08	0	(2.08)	3.67	0	(3.67)
Transportation	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
Laborers	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00

Goals are set by job categories for each protected group. An underrepresentation is indicated by a negative number, but if the DISCREPANCY is less than -1.00 position, a N/A will be displayed to show there is no underrepresentation.

ORIGINAL

WTR 14-09-011.

000473		REQUEST FOR COUNCIL ACTION CITY OF SAN DIEGO		1. CERTIFICATE (FOR AUDITOR) 330 03/10			
TO: CITY ATTORNEY		2. FROM (ORIGINATING DEPARTMENT): Water Department/Operations Division		3. DATE: AUGUST 25, 2008			
4. SUBJECT: Award Bid Contract for Furnishing Cationic Polymer for Water Treatment							
5. PRIMARY CONTACT (NAME, PHONE, & MAIL STA.) Jim Fisher, 619-527-7431		6. SECONDARY CONTACT (NAME, PHONE, & MAIL STA.) Jafer Kazem, 619-527-7436		7. CHECK BOX IF REPORT TO COUNCIL IS ATTACHED			
8. COMPLETE FOR ACCOUNTING PURPOSES							
FUND	41500	41500		9. ADDITIONAL INFORMATION / ESTIMATED COST:			
DEPT.	760	760		Total first year costs estimated at \$514,269.20 (incl. \$36,989.20 for tax) expended to two water treatment plant facilities benefitted by the chemical application. : total for five years shall not exceed \$3,909,340.52.			
ORGANIZATION	5651	5653					
OBJECT ACCOUNT	3221	3221					
JOB ORDER	565184	565301					
C.I.P. NUMBER							
AMOUNT	\$243,601.20	\$270,668.00					
10. ROUTING AND APPROVALS							
ROUTE (#)	APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED	ROUTE (#)	APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED
1	ORIG. DEPT	<i>[Signature]</i>	8/29/08	8	DEPUTY CHIEF	<i>[Signature]</i>	12/4/08
2	E.A.S.	<i>[Signature]</i>	8/27/08	9	C.O.O.	<i>[Signature]</i>	12/2/08
3	EOCP	<i>[Signature]</i>	10/16/08	10	CITY ATTORNEY	<i>[Signature]</i>	1/29/09
4	DOCKET LIAISON	<i>[Signature]</i>	10/28/08	11	ORIG. DEPT	<i>[Signature]</i>	
5	C.F.O./FM	<i>[Signature]</i>	11/24/08	DOCKET COORD: _____ COUNCIL LIAISON: <i>[Signature]</i>			
6	C.F.O./AUDITOR	<i>[Signature]</i>	12/01/08	COUNCIL PRESIDENT <i>[Signature]</i> <input type="checkbox"/> SPOB <input type="checkbox"/> CONSENT <input checked="" type="checkbox"/> ADOPTION			
7				COUNCIL DATE: 3-10-09			
11. PREPARATION OF: <input checked="" type="checkbox"/> RESOLUTIONS <input type="checkbox"/> ORDINANCE(S) <input type="checkbox"/> AGREEMENT(S) <input type="checkbox"/> DEED(S)							
1. Authorizing the Mayor and Chief Acquisition Officer to award a contract with Polydyne per Bid No. 9387-08-W, to furnish cationic polymer as may be required for one year period from date of full executed contract for a total estimated cost of \$514,269.20; terms net 30 days; with options to renew the contract for four (4) additional one (1) year periods with the price escalation not to exceed 20% of prices in effect at the end of each prior contract year.							
2. Authorizing the expenditure for the bid contract for cationic polymer from the Water Fund 41500, Department 760, estimated at \$514,269.20 in the first year; and potentially escalated in four option years, if department accepts the option years within the maximum 20%/year escalation. : total for five years shall not exceed \$3,909,340.52.							
11A. STAFF RECOMMENDATIONS: Adopt the resolution							
12. SPECIAL CONDITIONS (REFER TO A.R. 3.20 FOR INFORMATION ON COMPLETING THIS SECTION.) <u>COUNCIL DISTRICT(S):</u> ALL <u>COMMUNITY AREA(S):</u> ALL <u>ENVIRONMENTAL IMPACT:</u> THIS ACTIVITY IS CATEGORICALLY EXEMPT FROM CEQA PURSUANT TO STATE CEQA GUIDELINES, SECTION 15301. <u>HOUSING IMPACT:</u> NO IMPACTS <u>OTHER ISSUES:</u> NO OTHER ISSUES							

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000475

EXECUTIVE SUMMARY SHEET

DATE: August 25, 2008 REPORT NO. N/A
ATTENTION: Council President and City Council
ORIGINATING DEPT.: Water Department
SUBJECT: Award bid contract for furnishing cationic polymer for water treatment
COUNCIL DISTRICTS: All
STAFF CONTACT: Jafer Kazem at (619)527-7436.

REQUESTED ACTION:

Authorize the Mayor and Chief Acquisition Officer to award a contract with Polydyne to furnish cationic polymer for water treatment at Alvarado and Miramar Water Treatment Plants.

STAFF RECOMMENDATION: Adopt the resolution.

EXECUTIVE SUMMARY:

Bid 9387-08-W for the purchase of cationic polymer closed on June 13, 2008. Bids were requested for each of the City's three water treatment plants (Alvarado, Miramar and Otay). Three (3) bids were received and the apparent low bidders were Polydyne for Alvarado and Miramar water treatment plants and Ciba Specialty Chemical, Inc. for Otay water treatment plant. Since Ciba's contract was for less than \$500,000, it is processed through an open purchase order request. Cationic polymer is used in the treatment process to enhance coagulation and as a filter aid to maximize particle removal through the treatment process. The bid is provided with the options to renew the contract for four (4) additional one (1) year periods with the price escalation not to exceed 20% of prices in effect at the end of each prior contract year.


FISCAL CONSIDERATIONS:


Authorizing the expenditure for this bid contract from the Water Fund 41500, Department 760, estimated at \$514,269.20 in the first year and total for five year shall not exceed \$3,909,340.52.

PREVIOUS COUNCIL COMMITTEE ACTION: None

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS: N/A

KEY STAKEHOLDERS & PROJECTED IMPACTS (if applicable): Not applicable

 8/25/08
Alex Ruiz
Assistant Water Department Director


J.M. Barrett
Director of Public Utilities

000477

The City of San Diego
CERTIFICATE OF CITY AUDITOR AND COMPTROLLER

CERTIFICATE OF UNALLOTTED BALANCE

ORIGINATING

AC 2900425
 DEPT. NO.: 760

I HEREBY CERTIFY that the money required for the allotment of funds for the purpose set forth in the foregoing resolution is available in the Treasury, or is anticipated to come into the Treasury, and is otherwise unallotted.

Amount: _____ Fund: _____

Purpose: _____

Date: _____ By: _____

AUDITOR AND COMPTROLLER'S DEPARTMENT

ACCOUNTING DATA										
ACCTG. LINE	CY PY	FUND	DEPT	ORG.	ACCOUNT	JOB ORDER	OPERATION ACCOUNT	BENF/ EQUIP	FACILITY	AMOUNT
TOTAL AMOUNT										

FUND OVERRIDE ☐

CERTIFICATION OF UNENCUMBERED BALANCE

I HEREBY CERTIFY that the indebtedness and obligation to be incurred by the contract or agreement authorized by the hereto attached resolution, can be incurred without the violation of any of the provisions of the Charter of the City of San Diego; and I do hereby further certify, in conformity with the requirements of the Charter of the City of San Diego, that sufficient moneys have been appropriated for the purpose of said contract, that sufficient moneys to meet the obligations of said contract are actually in the Treasury, or are anticipated to come into the Treasury, to the credit of the appropriation from which the same are to be drawn, and that the said money now actually in the Treasury, together with the moneys anticipated to come into the Treasury, to the credit of said appropriation, are otherwise unencumbered.

Not to Exceed: \$514,269.20

Vendor: Polidyne, Inc.

Purpose: Authorize the expenditure for the bid contract for cationic polymer from the Water Fund 41500, Department 760, estimated at \$514,269.20 in the first year; and potentially escalated in four option years. Per year total for five years shall not exceed \$3,909,340.52.

Date: December 1, 2008

By: Norman Reyes

AUDITOR AND COMPTROLLER'S DEPARTMENT

ACCOUNTING DATA										
ACCTG. LINE	CY PY	FUND	DEPT	ORG.	ACCOUNT	JOB ORDER	OPERATION ACCOUNT	BENF/ EQUIP	FACILITY	AMOUNT
001	0	41500	760	5651	3221	565184				243,601.20
002	0	41500	760	5653	3221	565301				270,668.00
TOTAL AMOUNT										\$514,269.20

AC-361 (REV 2-92)

FUND OVERRIDE ☐

AC 2900425

000479

RESOLUTION NUMBER R- _____

DATE OF FINAL PASSAGE _____

A RESOLUTION AUTHORIZING AGREEMENT AWARD AND
EXECUTION; EXPENDITURE OF FUNDS FOR AGREEMENT
PURPOSES; AND TAKING RELATED ACTIONS.

WHEREAS, On June 13, 2008, Polydyne, Inc. was selected through a competitive bid process to furnish cationic polymer for water treatment at the Alvarado and Miramar Water Treatment Plants; NOW, THEREFORE:

BE IT RESOLVED, by the Council of the City of San Diego, as follows:

1. That the Mayor or his designee is hereby authorized and empowered to award and execute, for and on behalf of the City, an agreement with Polydyne, Inc. per Bid No. 9387-08-W, which is on file in the office of the City Clerk as Document No. RR _____ [Agreement] for the purpose of furnishing cationic polymer as may be required for a one year period, for a total estimated cost of \$514,269.20 in the first year, with options to renew the Agreement for four (4) additional one (1) year periods, for a total expenditure not to exceed \$3,909,340.52; and
2. That the expenditure of an amount not to exceed \$514,269.20 is authorized from Water Fund 41500 Department 760 in the first year, with options to renew the Agreement for four (4) additional one (1) year periods with a potential price escalation not to exceed 20% of prices in effect at the end of each prior Agreement year, provided the Water Department accepts the option years within the maximum escalation per year, for a total expenditure over five years not to exceed \$3,909,340.52; and

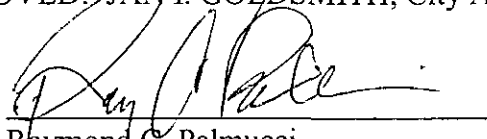
000480

3. That the City Auditor and Comptroller is authorized, upon advice from the administering department, to transfer excess budgeted funds, if any, to the appropriate reserves; and

4. That this activity is statutorily exempt from the California Environmental Quality Act [CEQA] pursuant to State CEQA Guidelines Section 15301.

APPROVED: JAN I. GOLDSMITH, City Attorney

By



Raymond C. Palmucci
Deputy City Attorney

RCP:js
01/29/2009
Or. Dept: Water
R-2009-723

I hereby certify that the foregoing Resolution was passed by the Council of the City of San Diego, at this meeting of _____.

ELIZABETH S. MALAND
City Clerk

By _____
Deputy City Clerk

Approved: _____
(date)

JERRY SANDERS, Mayor

Vetoed: _____
(date)

JERRY SANDERS, Mayor

000481



CITY OF SAN DIEGO
PURCHASING & CONTRACTING DEPT.
1200 Third Avenue, Suite 200
San Diego, CA 92101-4195

Bid No. 9387-08-W

REQUEST FOR BID

Closing Date: June 13, 2008

8200037

@ 3:00 pm P.S.T.

Subject: Furnish the City of San Diego with Cationic Polymer/Diallyldimethyl Ammonium Chloride

Timeline: As may be required for a period of one (1) year from date of award, with options to renew for four (4) additional one (1) year periods, in accordance with the attached specifications.

Company Polydyne Inc.
Federal Tax I.D. No. 34-1810283
Street Address One Chemical Plant Rd.
City Riceboro
State Georgia Zip Code 31323
Tel. No. (912) 880-2035 Fax No. (912) 880-2078
E-Mail polybiddpt@snfhc.com

Name Lawrence D. Grizzle
(PRINT OR TYPE)
Signature* Lawrence D. Grizzle
Title Business Manager
Date 06/11/08

**Authorized Signature: The signer declares under penalty of perjury that she/he is authorized to sign this document and bind the company or organization to the terms of this agreement.*

If your firm is not located in California, are you authorized to collect California sales tax? X Yes No

If Yes, under what Permit # SCOHB 99856313

City of San Diego Business Tax License #: B2006009880

SUBMITTED BIDS MUST HAVE AN ORIGINAL SIGNATURE.

Cash discount terms -0- % 30 days. [Terms of less than 20 days will be considered as Net 30 for bid evaluation purposes.]

State delivery time required: 3 days after receipt of order.

FOR CONSIDERATION AS A RESPONSIVE BID, THE FOLLOWING IS REQUIRED:

- 1) Bid must be submitted on official City bid forms.
- 2) All information on this Request for Bid cover page must be completed.
- 3) This cover page must be signed with an original signature.
- 4) Beginning January 1, 2008, all bidders must complete the Vendor Registration Form. Eventually, this form will also be available for on-line submittal.
- 5) Bid must be submitted on or before the exact closing date and time. Bid received after the exact closing date and time will NOT be considered. If hand delivering, please allow enough time for travel and parking to submit by the closing date and time.

FOR FURTHER INFORMATION CONCERNING THIS BID, PLEASE CONTACT:

WILLIAM BRODERICK, C.P.M., CPPB/muw, Principal Procurement Specialist

Phone: (619) 236-6653

Fax: (619) 236-5904

E-mail: WBroderick@sandiego.gov

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I. PRICING PAGE

A. PRICING FOR CONTRACT DELIVERY

Item No.	Est. Annual Qty.	U/M	Description	Unit Price	Extension
1.	144,000	Dry lbs	Cationic Polymer for Alvarado Water Filtration Plant Manufacturer: <u>Polydyne Inc.</u> Product No.: <u>Clarifloc C-308P</u> Percent (%) active Polymer in solution: 20% Total weight basis of 144,000 dry pounds of above noted polymer product: <u>720,000</u> lbs.	\$ 1.575/Dry Lb.	\$ 226,800.00
2.	160,000	Dry lbs	Cationic Polymer for Miramar Water Filtration Plant Manufacturer: <u>Polydyne Inc.</u> Product No.: <u>Clarifloc C-338</u> Percent (%) active Polymer in solution: 20% Total weight basis of 160,000 dry pounds of above noted polymer product: <u>800,000</u> lbs.	\$ 1.575/Dry Lb.	\$ 252,000.00
3.	47,000	Dry lbs	Cationic Polymer for Otay Water Filtration Plant Manufacturer: <u>Polydyne Inc.</u> Product No.: <u>Clarifloc C-378</u> Percent (%) active Polymer in solution: 20% Total weight basis of 47,000 dry pounds of above noted polymer product: <u>235,000</u> lbs.	\$ 2.195/Dry Lb.	\$ 103,165.00
TOTAL SECTION A:					\$ 581,965.00

B. PRICING OPTION FOR TESTING FULL WATER TREATMENT PLANT

Item No.	Est. Annual Qty.	U/M	Description	Unit Price	Extension
1.	500	Dry lbs	Cationic Polymer for Alvarado Water Filtration Plant Manufacturer: <u>Polydyne Inc.</u> Product No.: <u>Clarifloc C-308P</u> Percent (%) active Polymer in solution: 20% Total weight basis of 500 dry pounds of above noted polymer product: <u>2,500</u> lbs.	\$ 1.575/Dry Lb.	\$ 787.50
2.	500	Dry lbs	Cationic Polymer for Miramar Water Filtration Plant Manufacturer: <u>Polydyne Inc.</u> Product No.: <u>Clarifloc C-338</u> Percent (%) active Polymer in solution: 20% Total weight basis of 500 dry pounds of above noted polymer product: <u>2,500</u> lbs.	\$ 1.575/Dry Lb.	\$ 787.50
3.	500	Dry lbs	Cationic Polymer for Otay Water Filtration Plant Manufacturer: <u>Polydyne Inc.</u> Product No.: <u>Clarifloc C-378</u> Percent (%) active Polymer in solution: 20% Total weight basis of 500 dry pounds of above noted polymer product: <u>2,500</u> lbs.	\$ 2.195/Dry Lb.	\$ 1,097.50
TOTAL SECTION B:					\$ 2,672.50
TOTAL SECTIONS A & B:					\$ 584,637.50

II. SPECIFIC PROVISIONS

A. PRICING

Material shall be bid FOB Destination including all freight, freight surcharges, or delivery charges.

Include special taxes (if any) such as Superfund Tax and Agriculture Tax in the bid price of the chemical. The City does not pay Superfund Tax as a separate item. Do not include sales tax in bid price.

B. AWARD

This bid shall be awarded to the lowest responsible responsive bidder. Bidders must meet all requirements and testing criteria in Section III to be considered for award.

C. SUBMITTALS

1. JAR TESTING SAMPLE

Failure to provide the required sample may be cause for bid to be rejected as non-responsive.

A 100 ml sample of each polymer offered in the bid process for testing purposes and one (1) copy of each product's Material Safety Data Sheet (as specified in Section III, paragraph C).

2. BID SUBMITTAL

Bids must be returned in a sealed envelope to the Purchasing & Contracting Department, 1200 Third Avenue, Suite 200, San Diego, CA 92101. The bid number and opening date/time must be referenced on the outside of the envelope (lower left corner). Bids must be received by the Purchasing Reception Desk prior to bid opening at 3:00 p.m. on bid opening date. Faxed bids will not be accepted.

The original and three (3) copies of bid, including any attachments, shall be submitted.

3. SUBMITTALS REQUIRED WITH BID

Failure to provide the required submittals with the bid may be cause for the bid to be rejected as non-responsive.

- a. MSDS for each product bid (as specified in Section II, paragraph I).
- b. Bidder's References (as specified in Section II, paragraph M).

- c. National Science Foundation Certification form (as specified in Section III, paragraph A).
- d. Vendor Registration (use form on pages 20-21).

4. SUBMITTALS REQUIRED UPON PROVISIONAL AWARD

Failure to provide the following documentation within the time period specified may be cause for the provisional award to be voided and the bid to be rejected as non-responsive.

- a. Insurance requirements as specified in Section II, paragraph F.
- b. Taxpayer Identification Number (W-9) as specified in Section II, paragraph R, if not currently on file.
- c. Business Tax License as specified in Section II, paragraph U, if not currently on file.

D. OPTION TO RENEW

The City reserves the option to renew the contract for four (4) additional one (1) year periods under the terms and conditions of the current contract beginning on the anniversary of the commencement of contract. The four (4) one (1) year City option periods will be automatically exercised unless the Contractor receives a thirty (30) day City written notice from the end of the one (1) year one (1) year extension that the future option period will not be exercised.

The City's initial letter offering the Bidder an opportunity to renew the contract does not constitute an award of the option period. Any option acceptance must be confirmed by the City, in writing, before it becomes valid.

Bidder shall indicate the maximum percentage increase to which the prices in effect at the end of the current contract year would be subject if the renewal options were exercised. 20 %

Failure to submit or complete the price increase section above will be construed to mean that prices bid will not be increased during any option period. The City will not grant an option, if the Contractor requests a price increase which exceeds above stated percentage. If a price increase is requested, the Contractor must provide detailed supporting documentation to justify the requested increase. The requested increase will be evaluated by the City, and the City reserves the right to accept or reject such request.

This section will not be considered in the evaluation for award.

City of San Diego, Purchasing & Contracting
Amendment 1 to bid 9387-08-W
Attachment
Request for Bid No. 9387-08-W -RFB – Cationic Polymer
January 27, 2009

CLARIFICATIONS OF OPTION TO RENEW

The City of San Diego and Polydyne Inc. have bilaterally agreed to delete the first paragraph of the Option to renew provision in Section II, Paragraph D, and replace with below paragraph. All other terms and conditions remain the same

The City reserves the option to renew the contract for up to four (4) additional one (1) year periods under the terms and conditions of the current contract beginning on the anniversary of the commencement of contract. The City's acceptance of any of the four (4) one (1) year City option periods will be exercised within thirty (30) days from the end of the current one (1) year contract or option period.

Polydyne Inc.
Address: One Chemical Plant Rd.
Riceboro, GA 31323

Authorized signature and date: Lawrence D. Grizzle 01/28/09
Lawrence D. Grizzle, Business Manager

City of San Diego

Authorized signature and date _____

The City may also desire to extend a contract on a month-to-month basis upon expiration of the current contract period under the terms and conditions of the current contract unless modified in writing. The renewal is contingent on a mutual agreement between the City and the Contractor with such agreement to be confirmed in writing prior to the expiration of the contract period.

E. PRICE ADJUSTMENT CLAUSE FOR OPTION RENEWAL

In the event the Contractor does not request a price increase at the time of the contract renewal, and the Manufacturer subsequently announces a general increase in the price of their products, the Contractor may request an increase at that time. The Contractor must provide detailed supporting documentation from the Manufacturer to support the requested increase. The requested increase shall not exceed the percentage increase indicated in the "Option to Renew" clause.

F. INSURANCE REQUIREMENTS

All required insurance shall be submitted to Purchasing within ten (10) days of provisional award. Failure to provide the insurance certificates within the time frame specified by the City shall be cause for the bid to be rejected as non-responsive. Contractor shall maintain insurance in full force and effect during the entire period of performance under contract. Failure to do so shall be cause for termination of the contract.

All policies must have a thirty (30) day non-cancellation clause giving the City thirty (30) days prior written notice in the event a policy is canceled.

At the end of each contract year, the City reserves the right to review insurance requirements and to require more or less coverage depending upon assessment of the risk, the Vendor's past experience, and the availability and affordability of increased liability insurance coverage.

Insurance coverage must be from an insurance carrier licensed in the State of California and rated "A" or better by the A.M. Best Key Rating Guide.

The following coverage is required:

1. Commercial General Liability for a minimum of one million dollars each occurrence (\$1,000,000.00 EO). The City of San Diego must be named as an additional insured on the certificate.
2. Automobile Liability for a minimum of one million dollars combined single limit (\$1,000,000.00 CSL). The City of San Diego must be named as an additional insured on the certificate.
3. Workers' Compensation coverage in accordance with the laws of the State of California. Policy must contain a Waiver of Subrogation of Rights against the City of San Diego.

G. FREIGHT CARRIER

It is the vendor's responsibility to ensure that their freight carriers have proper Commercial General Liability, Automobile Liability, and Workers' Compensation insurance coverage. The City is not responsible for material until it has been delivered and accepted from the freight carrier. Therefore, the City accepts no liability for material prior to delivery or while it is under the vendor's possession, control, or under freight carriers' possession or control.

H. PUBLIC AGENCY

It is intended that any other public agency as defined by California Government Code § 6500 shall have the option to participate in any award made as a result of this solicitation. This option shall extend for the term of the agreement with the City of San Diego, and shall be subject to the contractor's acceptance. Any participating public agency shall accept sole responsibility for the placing of orders, arranging for delivery and/or services, and making payments to the contractor. The City of San Diego will not be liable, or responsible, for any obligations, including but not limited to financial responsibility, in connection with participation by other public agencies.

I. MATERIAL SAFETY DATA SHEETS

All Bidders must submit with their bids four (4) copies of the material safety data sheet (MSDS) for each product bid. Only those products whose label and MSDS clearly state the contents, hazard potential, and protective measures required shall be considered for purchase.

The Contractor must also send with each shipment one (1) copy of the MSDS for each item shipped. Failure to comply with this procedure will be cause for immediate termination of the contract for violation of safety procedures.

J. QUANTITIES

Quantities shown are estimates only. The City reserves the right to purchase more or less as need dictates. Successful bidder agrees to waive any differences, whether more or less, between estimated quantities and quantities actually ordered.

K. BACKORDERS

Contractor shall ship items in the quantities shown on the Purchase Order, backorders are unacceptable without prior City approval. Unauthorized backorders may be cause for contract termination. The City reserves the right to evaluate the number of backorders to determine if backorders are negatively impacting the City's daily operations, which may be cause for termination of the contract.

L. SUBSTITUTIONS

No substitutions of items bid shall be permitted without review and written authorization from the City. The City shall be given a thirty (30) day notice of any proposed substitution.

M. REFERENCES/QUALIFICATIONS

Bidders are required to demonstrate successful performance for work of similar size and scope as specified in this contract during the past three (3) years. Bidders must also demonstrate that they are properly equipped to perform the work as specified in this contract.

To enable the City to evaluate the responsibility, experience, skill, and business standing of the Bidder, the following documents must be included with the bid submittal:

- Bidder's References (use form on page 19).

N. GENERAL PROVISIONS

Except as otherwise specified herein, the City of San Diego General Provisions, dated January 3, 2005, (on file in the Office of the Purchasing Agent) are incorporated as part of this bid and any resulting contract by reference. The General Provisions are available online at www.sandiego.gov/purchasing or via request from the Purchasing & Contracting Department by calling (619) 236-6000.

By signing and/or authorizing the bid submittal, the Bidder/Proposer acknowledges that they have read and understood the meaning, intent and requirements of said General Provisions; and acknowledge said General Provisions are included as a part of this bid.

O. ADDENDA

It is the bidders' responsibility to ensure that all addenda issued are incorporated in their bid submittal.

Failure to acknowledge and incorporate addenda will not relieve the bidder of the responsibility to meet all terms and conditions of the specifications for price bid.

P. EXCEPTIONS

If a bidder/proposer takes any exception to any part of these specifications as written, or as amended by any Addenda subsequently issued, or the General Provisions, they must do so in writing. Said exceptions must be submitted with the bid/proposal. Failure to do so will be construed as acceptance of all provisions of the specifications and General Provisions.

Q. BID RESULTS

Bid results will not be given out over the phone. To obtain bid results, either (1) attend the bid opening or (2) provide a self-addressed stamped envelope referencing the bid number. Envelopes may be submitted with the bid, or mailed directly to the Purchasing & Contracting Department. They will be kept on file until the bid opens and the extensions are verified. Bid tabulations will generally be mailed to you within three (3) working days after the bid opening to review bid tabulation.

R. REQUEST FOR TAXPAYER IDENTIFICATION NUMBER

I.R.S. regulations require the City of San Diego to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide services or products to the City of San Diego. This information is necessary to complete Form 1099 at the end of each tax year.

In order to comply with I.R.S. regulations, the City of San Diego requires each vendor to provide a Form W-9 prior to award of contract. Failure to provide a completed Form W-9 within three (3) business days of the City's request may result in a bid being declared non-responsive and rejected.

S. AUDIT AND INSPECTION OF RECORDS

The Contractor, and any Subcontractors, shall make available upon request all records which in the opinion of the City Auditor are necessary to conduct an audit of this contract. Such records may include invoices, materials, payrolls, personnel records, and other data relating to all matters covered by this contract. The Contractor and Subcontractors shall retain such data and records for a period of not less than three (3) years following receipt of final payment. The Contractor shall make available all requested data and records at reasonable locations within the City or County of San Diego, at any time during normal business hours, and as often as the City deems necessary. If records are not made available within the City or County of San Diego, the Contractor shall pay the City's travel costs to the location where the records are maintained. Failure to make requested records available for audit by the date requested will result in immediate termination of contract.

T. ASSIGNMENT OF CONTRACT

Contractor shall not assign this contract, or any right or interest hereunder, without prior written consent of the City.

U. BUSINESS TAX LICENSE

Any company doing business with the City of San Diego is required to comply with Section 31.0301 of the San Diego Municipal Code regarding Business Tax. For more information please visit the City of San Diego website at www.sandiego.gov/treasurer/ or call (619) 615-1500.

The City requires that each vendor to provide a copy of their Business Tax License, or a copy of their application receipt. Failure to provide the required documents within ten (10) business days of the City's request may result in a Bid being declared non-responsive and rejected.

III. GENERAL REQUIREMENTS

A. CATIONIC POLYMER (DIALLYLDMETHYL AMMONIUM CHLORIDE) REQUIREMENTS

1. The material shall conform to the American Water Works Association (A.W.W.A.) Standard for Cationic Polymer A.W.W.A. B451-04 with addendum B451a-07 and be NSF Certified for Drinking Water Treatment, Standard 60. Proof of NSF Certification must accompany bid submittals.
2. The specific gravity of the material at 25° C shall be in the range stated on the product's Material Safety Data Sheet.
3. The heavy metal content shall be less than 2.0 mg/liter.
4. The pH shall range from 4.0 – 7.5.
5. The material shall be free of biological contamination.
6. The material shall be chemically non-reactive.
7. The material must be stable to the actions of strong oxidants such as chlorine and potassium permanganate.

B. FILTRATION PLANT WATER SAMPLES

Bidder may obtain plant water samples for off-site testing purposes. To arrange for collection of water samples, bidders shall contact the Senior Water Operations Supervisors as named below, prior to the bid opening date.

1. Greg Burrow
Miramar Water Filtration Plant
10710 Scripps Lake Drive
San Diego, CA 92131
(619) 668-2773
2. Alberto Aspili
Otay Water Filtration Plant
1500 Wueste Road
Chula Vista, CA 91915
(619) 424-0454
3. Lori Rountree
Alvarado Water Filtration Plant
5540 Kiowa Drive
La Mesa, CA 91942
(619) 424-0462

C. PRODUCT JAR TESTING

Bidders are required to submit a 100 ml sample of each polymer offered in the bid process for testing purposes and one (1) copy of each product's Material Safety Data Sheet. Products failing to meet specifications will be rejected as non-responsive. Jar testing samples are required to be submitted to the following location by 3:00 p.m. on June 13, 2008 prior to bid opening date:

City of San Diego, Water Quality Laboratory
 Attention: Mike Williams, Water Quality Superintendent
 5530 Kiowa Drive
 La Mesa, CA 91942-1331
 (619) 668-3260

Each sample is required to be labeled, identifying manufacturer's name, and name of product. *The City prefers samples be mailed. If personally delivering samples, please call twenty-four (24) hours in advance with an estimate drop off time (for security purposes).*

This jar testing sample will be used as a standard for future shipments from the successful bidder.

D. JAR TEST PROCEDURES FOR POLYMER1. Alvarado

Assumes 85MGD and detention time of one (1) hour, fifty (50) minutes through settling.

TIME	DOSE	ACTION	RPM	DURATION
0	-----	Begin stirring	5	-----
:32	2.8 ppm	Add raw water chlorine	5	-----
1:31	0.12 ppm	Add KMnO ₄	5	-----
3:19	7 ppm Fe; 1 ppm poly	Add ferric and polymer, flash mix	300	:36 seconds
3:55	-----	Begin mixing	30	10:14 minutes
14:09	-----	Mixing	5	26:11 minutes
40:20	-----	Begin settling	0	36:25 minutes
1:16:45	-----	*End Settling	-----	-----

* Visual approximation of detention time through settling

At end of settling, sample for TOC. Pour off one (1) liter of the settled water. Add 1.4 ppm settled chlorine or Cl₂. Sample for particle sizing. Measure pH. Add 0.5 ppm of ammonium hydroxide. Add caustic until pH 8.2 is reached. Sample for THM.

Particle sizing: Serially filter sample through 2.0um, 1.0um, 0.6um, and 0.4um mesh polycarbonate membranes to obtain the finished water turbidity.

2. Miramar

Assume 140 MGD and detention time of one (1) hour, nine (9) minutes through settling. Detention time is the average through four basins.

TIME	DOSE	ACTION	RPM	DURATION
0	7 ppm	Add ferric; begin stirring	10	-----
:35	2.2 ppm	Add Cl ₂	10	-----
:55	0:11	Add KmnO ₄	10	-----
1:10	6.7 ppm	Add lime	10	-----
1:30	1 ppm	Add polymer	10	-----
1:40	-----	Flash mix	300	:30 seconds
2:10	-----	Travel Time*	10	5:00 minutes
7:10	-----	Begin mixing	60	8:00 minutes
15:10	-----	Mixing	40	8:00 minutes
23:10	-----	Mixing	10	15:00 minutes
53:10	-----	Begin settling	0	30:00 minutes
1:23:10	-----	**End Settling	-----	-----

*From flash mix to mixing basin.

** Visual approximation of detention time through longest basin

At the end of settling, sample for TOC. Pour off one (1) liter of the settled water. Add 1.2 ppm settled Cl₂. Sample for particle sizing. Measure pH. Add 2.4 ppm of ammonium sulfate. Sample for THM. It is not usually necessary to add any caustic for pH adjustment.

Particle sizing: Serially filter sample through 2.0um, 1.0um, 0.6um, and 0.4um mesh polycarbonate membranes to obtain the finished water turbidity.

3. Otay

Assume 24 MGD and detention time of one (1) hour, thirty (30) minutes through settling.

TIME	DOSE	ACTION	RPM	DURATION
0	-----	Begin stirring	5	-----
0	0:33 ppm	Add KMnO ₄	5	-----
:30	12 ppm Fe; 3 ppm poly	Begin flash mix	200	:30 seconds
:30	-----	Mixing	60	10:00 minutes
1:15	-----	Mixing	30	10:00 minutes
		Mixing	3	10:00 minutes
1:25	-----			
20:30	-----	Settling	0	30:00 minutes
50:30	-----	*End Settling	-----	-----

* Visual approximation of detention time through settling

At the end of settling, sample for TOC. Pour off one (1) liter of the settled water. Add 1.4 ppm settled Cl₂. Samples for particle sizing. Measure pH. Add 0.5 ppm of ammonium hydroxide. Add caustic until pH 8.2 is reached. Sample for THM.

Particle sizing: Serially filter sample through 2.0um, 1.0um, 0.6um, and 0.4um mesh polycarbonate membranes to obtain the finished water turbidity.

E. JAR TESTING RESULTS

Upon completion of lab jar testing, each manufacturer that submitted products for testing will receive written notification as to which products passed the jar testing criteria. Only the manufacturers whose polymer products have passed the jar testing criteria will be considered for full scale testing.

To be eligible for the award process, the polymer product must have met the following jar testing criteria:

Effluent Turbidity: <0.1 (as outlined by Partnership for Safe Drinking Water).
TTHM Formation: <64 ppb

To obtain jar testing results and polymer and ferric chloride dosage rates, manufacturers must contact: Mike Williams, Water Quality Superintendent at (619) 668-3233. Samples previously tested for RFI 4844-02-S which successfully met the above criteria may not be retested, but will be acceptable products for bid consideration.

NOTE: Manufacturers may receive and view only the test results for their products prior to bid award.

F. BID EVALUATION

Products bid that successfully complete the jar testing process, will be evaluated based on the following equation for Cost/MG:

$$\text{Cost/MG} = [(\text{polymer dose by dry weight}) \times (8.34 \text{ lb/gal}) \times (\text{polymer cost/lb})] + [(\text{ferric chloride dose as ferric}) \times (8.34 \text{ lb/gal}) \times \text{ferric cost of } \$0.11/\text{lb}]$$

If the percent of ferric in ferric chloride used in the jar testing is different from 42 percent, then the unit cost of \$0.11 per lb. for ferric chloride needs to be adjusted accordingly.

G. CATIONIC POLYMER FULL-SCALE PLANT TESTING PERFORMANCE CRITERIA

The City reserves the right, prior to award of contract, to ensure that the product meets the following Full-Scale Plant Testing Performance Criteria:

1. Effluent Turbidity: < 0.1 (as outlined by Partnership for Safe Drinking Water)
2. Total Trihalomethanes (TTHM) Formation: <64 ppb

Full-scale plant testing of the low bid product for each plant will be conducted for this purpose.

If the polymer product fails to meet the Full-Scale Plant Testing Performance Criteria, then the contract will not be awarded to the low-bidder and the process will be repeated with the product of the second low-bidder and subsequent bidders, if necessary, until a product is found for each plant that conforms to the bid performance criteria.

The low-bidder of polymer product for each of the water filtration plants will be required to deliver five hundred (500) gallons of the polymer product to the respective plant within one (1) week of request by the City. The product will be provided at the expense of the City, per prices bid herein. Plant operations staff will be solely responsible for the plant testing and will consult with bidder, if necessary.

H. DELIVERY REQUIREMENTS

1. It is estimated that the City of San Diego will require polymer deliveries every six (6) weeks or as needed to each of the following Water Filtration Plants:

- a. Delivery Site for Item No. 1:

Alvarado Water Filtration Plant
5540 Kiowa Drive
La Mesa, CA 91942

Trucking company to deliver polymer: Quality Carriers

- b. Delivery Site for Item No. 2:

Miramar Water Filtration Plant
10710 Scripps Lake Drive
San Diego, CA 92131

Trucking company to deliver polymer: Quality Carriers

- c. Delivery Site for Item No. 3:

Otay Water Filtration Plant
1500 Wueste Road
Chula Vista, CA 91910

Trucking company to deliver polymer: Quality Carriers

2. Vendor shall supply samples of each load of bulk material delivered at the time of delivery for evaluation of the shipment as a part of the quality control process.
3. Delivery weight of material shall be determined by certified scales. Certificates of weight shall be furnished by vendor for all loads of polymer at the time of delivery. Each delivery slip must indicate the total solids, total polymer, and polymer concentration.
4. Delivery will be provided by contractor in tank truck lots of 4,500 – 5,000 gallons to each of the above locations between the hours of 7:00 a.m. and 2:00 p.m., Monday through Friday, except holidays.

I. EMERGENCY ORDER

In an emergency the City requires delivery within forty-eight (48) hours. In the event the contractor is unable to deliver within this time frame the City reserves the right to purchase off-contract.

In addition, if at any time the contractor fails to deliver material within time indicated on the proposal page and this causes any plant to run short of product or run the risk of being totally out of this product, the City reserves the right to purchase off-contract. If under such circumstance it becomes necessary for the City to obtain the product on an emergency basis (due to failure of contractor to deliver, or the apparent likelihood that contractor will be unable to deliver) the City will bill contractor for the difference in cost between the contract price and the price the City paid for the emergency delivery.

Furthermore, should the City be subjected to fines or any other expenses as a result of Contractor's or agents of the Contractor's failure to deliver the product herein specified, Contractor will be held liable to the City for reimbursement of the entire amount of expense imposed upon the City because of late or non-delivery.

BIDDER'S REFERENCES

The Bidder is **required** to provide a minimum of three (3) references where work of a similar size and nature was performed within the past three (3) years. This will enable the City of San Diego to judge the responsibility, experience, skill, and business standing of the Bidder.

REFERENCES

Company Name: City of St. Louis Contact Name: Don Rea
Address: 10450 Riverview Drive Phone Number: (314) 868-5640
St. Louis, MO 63103 Fax Number: (314) 622-4826
Dollar Value of Contract: \$ 670,000.00 per year Contract Dates: 02/22/2006 - 05/31/09
Requirements of Contract: Supply of Dadmac Polymer

Company Name: City of Phoenix Contact Name: Paul Mally
Address: 3030 West Dunlap Phone Number: (602) 256-4246
Phoenix, AZ 85003 Fax Number: (602) 534-1933
Dollar Value of Contract: \$ 427,000.00 per year Contract Dates: 02/21/03 - 04/13/08
Requirements of Contract: Supply of Dadmac Polymer

Company Name: East Bay M.U.D. Contact Name: James F. Smith
Address: 375 Eleventh St. Phone Number: (510) 287-1967
Oakland, CA 94623 Fax Number: (510) 287-0688
Dollar Value of Contract: \$ 245,000.00 per year Contract Dates: 11/12/03 - 12/31/07
Requirements of Contract: Supply of Dadmac Polymer

000500

Bid No. 9387-08-W



The City of San Diego
Purchasing and Contracting Department
Vendor Registration

Vendor ID: POL 05002064

Firm Information

Firm Name: Polydyne Inc.
Firm Address: One Chemical Plant Rd.
City: Riceboro State: GA Zip: 31323
Phone: (912) 880-2035 Fax: (912) 880-2078
Taxpayer ID: 34-1810283 Business License: B2006009880
Website: www.polydyneinc.com

Contact Information

Name: Frank Cimino
Title: Regional Sales Manager
Email: fcimino@polydyneinc.com
Phone: (951) 678-5368 Cell: (909) 214-4338

Address to Which Bids Should Be Sent (if different from above)

☒ Check here if same from above

Mailing Address:
City: State: Zip:

Contractor Licenses

License Number:	N/A	License Type:	
License Number:		License Type:	
License Number:		License Type:	
License Number:		License Type:	

Form continues on reverse side

000501

Bid No. 9387-08-W

Ownership Classification

Classification: * OBE (Other Business Enterprise)

(* select from the list of Ownership Classification Codes provided below)

Check here if Certified by Agency: ☐

Certification #:

Agency:

Certification #:

Agency:

Ownership Classification Codes:

MBE/African American	(Minority Business Enterprise/African American)
MBE/Hispanic	(Minority Business Enterprise/Hispanic)
MBE/Asian	(Minority Business Enterprise/Asian)
MBE/Pacific Islander	(Minority Business Enterprise/Pacific Islander)
MBE/Native American	(Minority Business Enterprise/Native American)
WBE	(Women Business Enterprise)
DBE	(Disadvantaged Business Enterprise)
DVBE	(Disabled Veteran Business Enterprise)
OBE	(Other Business Enterprise)

Product/Services Description:

Supply of Polymers for Water and
Wastewater Treatment

Product/Services Information:

NAICS Codes: * 325211

*select from a list of available NAICS Codes either from the website
<http://www.census.gov/ipeds/www/naics.html>
and select 2007 NAICS codes 6 digit only
or from a hard copy available at Purchasing and Contracting

000503
Randal Vickery

From: Randal Vickery
Sent: Thursday, March 27, 2003 5:20 PM
To: 'Terrell Breaux'
Subject: RE: Bid 5410-03-G

Item	Estimated Annual QTY	Description
Delivered Price per Dry Pound	Extension	

1.	144,000 Dry Pounds	Cationic Polymer for
\$0.825	\$118,800.00	Alvarado Water Filtration Plant. Manufacturer Name: Polydyne Inc. Product No.: Clarifloc C-308P % Active Polymer in sol.: 20% Total Weight basis of 144,000 dry pound of above noted polymer product: 720,000 lbs.

2.	160,000 Dry Pounds	Cationic Polymer for
\$0.820	\$131,200.00	Miramar Water Filtration Plant Manufacturer Name: Polydyne Inc. Product No.: Clarifloc C-338 % Active Polymer in sol.: 20% Total Weight basis of 160,000 dry pound of above noted polymer product: 800,000 lbs.

Polydyne Inc. is pleased to submit this bid revision to the City of San Diego. If you have any questions concerning this bid revision, please contact me via e-mail or call me at (912) 8800-2035. MSDS and PDS are available upon request.

-----Original Message-----

From: Terrell Breaux [mailto:TBreaux@SanDiego.gov]
Sent: Thursday, March 27, 2003 3:11 PM
To: Polydyne Bid
Cc: Gary Stalker; Richard Snow
Subject: Bid 5410-03-G

It has come to the attention of the City of San Diego that we will need a polymer with less than the 40% solution requested in the subject bid. We would like to offer you an opportunity to revise your pricing based on 20% viscosity. Please provide a price by COB Mar 28 for lines 1 and 2 of the subject bid.

Terrell D.Breaux
Procurement Specialist
City of San Diego Purchasing
619-533-4507 Phone, MWF
858-636-4897 Phone, T,TH
619-533-3233 Fax
MS 56P
www.sandiego.gov/purchasing/
"Procuring the Best for Less"

000505



AFFIDAVIT

Polydyne Inc. hereby states that our C-308P is a 20% active DADMAC product. A 40% DADMAC product (C-318) was qualified under RFI 4844-02-S in 2002 and we were later awarded Contract #5410-03-G with C-318. Upon request from the City of San Diego to provide product as a 50% dilution (see memo attached), we complied. The 50% dilution of C-318 is "also known as" (AKA) C-308P. Polydyne has supplied C-308P (billed as C-318) for the duration of the current contract period.

Polydyne Inc. hereby states that our C-338P is a 20% active DADMAC product. A 40% DADMAC product (C-348) was qualified under RFI 4844-02-S in 2002 and we were later awarded Contract #5410-03-G with C-348. Upon request from the City of San Diego to provide product as a 50% dilution (see memo attached), we complied. The 50% dilution of C-348 is "also known as" (AKA) C-338. Polydyne has supplied C-338 (billed as C-348) for the duration of the current contract period.

Polydyne is submitting Clarifloc C-308P and C-338 for Bid #9387-08-W. As affirmed above, these polymers have been supplied to the City throughout the current contract period under the above-referenced designations.

A handwritten signature in black ink, appearing to read "Lawrence D. Grizzle", written over a horizontal line.

Lawrence D. Grizzle, Business Manager

June 11, 2008

Date Signed



Live safer.™

 > Close window to
exit NSF Listings.

000507

NSF Product and Service Listings

These Listings were Last Updated on **Wednesday, June 11, 2008** at 4:15 AM Eastern Time.
Please contact NSF International to confirm the status of any Listing, report errors, or make suggestions.

Warning: NSF is concerned about fraudulent downloading and manipulation of website text. If you have received this listing in hard copy, always confirm this certification/listing information by going directly to <http://www.nsf.org/Certified/PwsChemicals/Listings.asp?Company=37260&Standard=060&> for the latest most accurate information.

NSF/ANSI STANDARD 60

Drinking Water Treatment Chemicals - Health Effects

POLYDYNE INCORPORATED



P.O. BOX 279
RICEBORO, GA 31323
800-848-7659

Facility : # 1 USA

Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L

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Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

Facility : LOS ANGELES, CA

Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50 mg/L
Clarifloc® C-318	Coagulation & Flocculation	25 mg/L
Clarifloc® C-318R	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50 mg/L
Clarifloc® C-348	Coagulation & Flocculation	25 mg/L
Clarifloc® C-358	Coagulation & Flocculation	50 mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
	Coagulation & Flocculation	25mg/L

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Clarifloc® C-4440

Clarifloc® LF-3541

Coagulation & Flocculation

100 mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

Polyacrylamide[PC]*Trade Designation**Product Function**Max Use*

Clarifloc® N-120P

Coagulation & Flocculation

3mg/L

Clarifloc® N-6310

Coagulation & Flocculation

3 mg/L

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Polymer Blends[AL] [PD]*Trade Designation**Product Function**Max Use*

Clarifloc® C-2005

Coagulation & Flocculation

155 mg/L

Clarifloc® C-2010

Coagulation & Flocculation

163 mg/L

Clarifloc® C-2015

Coagulation & Flocculation

147 mg/L

Clarifloc® C-2020

Coagulation & Flocculation

114 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

Facility : RICEBORO, GA**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]***Trade Designation**Product Function**Max Use*

Clarifloc® C-308P

Coagulation & Flocculation

50mg/L

Clarifloc® C-318

Coagulation & Flocculation

25mg/L

Clarifloc® C-328

Coagulation & Flocculation

83mg/L

Clarifloc® C-338

Coagulation & Flocculation

50mg/L

Clarifloc® C-348

Coagulation & Flocculation

25mg/L

Clarifloc® C-358

Coagulation & Flocculation

50mg/L

Clarifloc® C-368

Coagulation & Flocculation

29mg/L

Clarifloc® C-378

Coagulation & Flocculation

50mg/L

Clarifloc® C-388

Coagulation & Flocculation

100mg/L

Clarifloc® C-398

Coagulation & Flocculation

29mg/L

Clarifloc® C-4408

Coagulation & Flocculation

125mg/L

Clarifloc® C-4410

Coagulation & Flocculation

100mg/L

Clarifloc® C-4411

Coagulation & Flocculation

91mg/L

Clarifloc® C-4412

Coagulation & Flocculation

83mg/L

Clarifloc® C-4413

Coagulation & Flocculation

77mg/L

Clarifloc® C-4414

Coagulation & Flocculation

72mg/L

Clarifloc® C-4415

Coagulation & Flocculation

67mg/L

Clarifloc® C-4416

Coagulation & Flocculation

62mg/L

Clarifloc® C-4417

Coagulation & Flocculation

59mg/L

000510

Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

Polyacrylamide[PC]*Trade Designation**Product Function**Max Use*

Clarifloc® A-210P	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3301	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3308	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3310	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3320	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3333P	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3340	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3360	Coagulation & Flocculation	1mg/L
Clarifloc® A-6320	Coagulation & Flocculation	3 mg/L
Clarifloc® A-6330	Coagulation & Flocculation	1 mg/L
Clarifloc® A-6340	Coagulation & Flocculation	1 mg/L
Clarifloc® A-6360	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3203	Coagulation & Flocculation	1mg/L
Clarifloc® C-3205	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3210	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3223	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3226	Coagulation & Flocculation	1mg/L
Clarifloc® C-3230	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3257	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3280	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6203	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6210	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6215	Coagulation & Flocculation	1mg/L
Clarifloc® C-6220	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6240	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6260	Coagulation & Flocculation	2 mg/L
Clarifloc® N-120P	Coagulation & Flocculation	3 mg/L
Clarifloc® N-3300P	Coagulation & Flocculation	1 mg/L
Clarifloc® N-6310	Coagulation & Flocculation	3 mg/L

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[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Polyamines[PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-309P	Coagulation & Flocculation	20mg/L
Clarifloc® C-319	Coagulation & Flocculation	20mg/L
Clarifloc® C-329	Coagulation & Flocculation	13mg/L
Clarifloc® C-339	Coagulation & Flocculation	20mg/L
Clarifloc® C-349	Coagulation & Flocculation	13mg/L
Clarifloc® C-359	Coagulation & Flocculation	20mg/L
Clarifloc® C-379	Coagulation & Flocculation	13mg/L
Clarifloc® C-389	Coagulation & Flocculation	20mg/L
Clarifloc® C-399	Coagulation & Flocculation	20mg/L
FLOQUAT™ FL 3050 PWG	Coagulation & Flocculation	20mg/L
PRP 3050	Coagulation & Flocculation	20mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : PEARLINGTON, MS

Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50mg/L
Clarifloc® C-348	Coagulation & Flocculation	25mg/L
Clarifloc® C-358	Coagulation & Flocculation	50mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-398	Coagulation & Flocculation	29mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	71mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
	Coagulation & Flocculation	53mg/L

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Clarifloc® C-4419		
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

Polyamines[PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-309D	Coagulation & Flocculation	32mg/L
Clarifloc® C-309P	Coagulation & Flocculation	20mg/L
Clarifloc® C-319	Coagulation & Flocculation	20mg/L
Clarifloc® C-329	Coagulation & Flocculation	13mg/L
Clarifloc® C-339	Coagulation & Flocculation	20mg/L
Clarifloc® C-349	Coagulation & Flocculation	13mg/L
Clarifloc® C-359	Coagulation & Flocculation	20mg/L
Clarifloc® C-379	Coagulation & Flocculation	13mg/L
Clarifloc® C-389	Coagulation & Flocculation	20mg/L
Clarifloc® C-399	Coagulation & Flocculation	20mg/L
FLOQUAT™ FL 3050 PWC	Coagulation & Flocculation	20mg/L
PRP 3050	Coagulation & Flocculation	20mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Number of matching Manufacturers is 1

Number of matching Products is 171

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CLARIFLOC® C-308P POLYMER

CHARACTERISTICS

CLARIFLOC C-308P polymer is a low molecular weight, homopolymer of diallyldimethylammonium chloride. It is an effective organic coagulant for water and wastewater clarification in a wide variety of industrial, municipal and mining applications. CLARIFLOC C-308P can partially or totally replace alum, ferric, lime and other inorganic coagulants, thereby reducing sludge volume. Unlike inorganics, it is effective over very wide pH ranges. CLARIFLOC C-308P is approved by the NSF for clarification of potable water at dosages up to 50 mg/L.

TYPICAL PROPERTIES

Physical Form	Clear Amber Liquid
Density	8.59 lbs/gal
Freezing Point	25 F. (-4 C.)
Solubility	Totally Water Soluble

PREPARATION AND FEEDING

CLARIFLOC C-308P is a solution polymer which can be diluted to any convenient concentration for feeding. No special make-down or activation procedures are necessary. The polymer can be diluted in-line using a static mixer or in a stirred vessel. Diluting to 1-10% is highly recommended for all clarification applications because the coagulant will be distributed more efficiently into the system with less chance of overdose.

MATERIALS OF CONSTRUCTION

Crosslinked polyethylene, fiberglass, stainless steel and lined mild steel are the preferred materials of construction for bulk tanks. Unlined mild steel, black iron, galvanized steel, or copper are not recommended in any part of the polymer feed system. Stainless steel or PVC are the best choice for pump heads and feed lines.

MANUFACTURING SPECIFICATIONS

Specific Gravity	1.03-1.05
% Active	19.0-21.0
Product Viscosity	80-180 cPs
Product pH	5.0-7.0

HANDLING AND STORAGE

CLARIFLOC C-308P has a suggested in-plant storage life of one year in unopened drums. For best results, store at 40-90 F. Protect from freezing. If the product freezes, allow it to warm up in a heated area and thaw thoroughly before attempting to use it. For spills of CLARIFLOC C-308P, sprinkle sawdust or vermiculite over the spill area and sweep the material into approved chemical disposal containers.

PRODUCT SAFETY INFORMATION

CLARIFLOC C-308P is a mildly acidic product that can irritate the skin and eyes, so gloves, rubber apron and goggles should be worn during the handling of this product. Anyone responsible for the procurement, use or disposal of this product should familiarize themselves with the appropriate safety and handling information outlined in the **POLYDYNE** Material Safety Data Sheet. In the event of an emergency with CLARIFLOC C-308P, contact Chemtrec anytime day or night at (800) 424-9300.

SHIPPING

CLARIFLOC C-308P Polymer is shipped in 55 gallon, lined steel, disposable drums containing approximately 450 pounds net. It is also available in 275 gallon, poly-lined, disposable liquabins containing approximately 2300 pounds net. Bulk quantities are also available.

ADDITIONAL INFORMATION

To place an order or obtain technical information from any location in the continental United States, call toll free:

(800) 848-7659

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MATERIAL SAFETY DATA SHEET

PAGE:	1 of 5
REVISION DATE:	09/16/2006
PRINT DATE:	12/18/2007

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

CLARIFLOC C-308P POLYMER

Supplier :

POLYDYNE INC.

PO Box 279

Riceboro, Georgia 31323

Tel : 800-848-7659 Fax : 912-884-8770

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation :

Cationic polymer in solution

Chemical Name	CAS-No	Weight %
Polydiallyldimethylammonium chloride (Polydadmac)	26062-79-3	20-50

3. HAZARDS IDENTIFICATION

Spills produce extremely slippery surfaces.

Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Inhalation : Move to fresh air.

Skin contact : Wash with water and soap as a precaution. In case of persistent skin irritation, consult a physician.

Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

Ingestion : The product is not considered toxic based on studies on laboratory animals.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water, water spray, foam, carbon dioxide (CO₂), dry powder

Special fire-fighting precautions : Spills produce extremely slippery surfaces.

Protective equipment for firefighters : No special protective equipment required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : No special precautions required.

Environmental precautions : Do not contaminate water.

Methods for cleaning up : Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilled in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling : Avoid contact with skin, eyes and clothing. When preparing the working solution ensure there is adequate ventilation. Do not breathe vapours or spray mist. When using do not smoke.

Storage : Keep in a dry, cool place (0 - 35°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls : Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Personal protection equipment

- *Respiratory protection :* In case of insufficient ventilation wear suitable respiratory equipment.
- *Hand protection :* Rubber gloves.
- *Eye protection :* Safety glasses with side-shields. Do not wear contact lenses.
- *Skin protection :* Chemical resistant apron or protective suit if splashing or contact with solution is likely.

Hygiene measures : Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Color : amber

Odor : slight

pH : 4 - 8 for product series. See Technical Bulletin for specific value.

Melting point (°C) : Not applicable.

Flash point (°C) : >100°C

Autoignition temperature (°C) : >200°C

Bulk density : See Technical Bulletin

Water solubility : Completely miscible.

Viscosity (mPa s) : See Technical Bulletin

10. STABILITY AND REACTIVITY

Stability : Product is stable, No hazardous polymerization will occur.
Oxidizing agents may cause exothermic reactions.

Hazardous decomposition products : No decomposition if stored and applied as directed. Burning of the dried material can produce : hydrogen chloride gas, nitrogen oxides (NOx), carbon oxides (COx).

11. TOXICOLOGICAL INFORMATION

Acute toxicity

- *Oral :* LD50/oral/rat > 2000 mg/kg
- *Dermal :* This product has been tested for cutaneous irritation on New Zealand White male rabbits according to OECD guideline 404. No effects (erythema or edema) were observed after 24 hours. Not irritating
- *Inhalation :* The product is not expected to be toxic by inhalation.

Irritation

- *Skin :* May cause skin irritation with susceptible persons
- *Eyes :* Testing conducted on rabbits showed minor transient irritation which cleared within days.

Sensitization : The product is not expected to be sensitizing.

Chronic toxicity : NOEL / Oral / rat / 90-day = 5000 mg/kg
Two-year feeding studies on rats and dogs did not reveal any adverse health effects.

Other information : Not mutagenic in AMES Test.
Not mutagenic in micronucleus test on mice.
Not teratogenic, NOEL = 175 mg/kg.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

The product is rapidly eliminated from the aquatic medium through irreversible adsorption onto suspended matter (sludge, clays, humic and other organic acids) and abiotic degradation (hydrolysis). The degradation products are practically non-toxic to aquatic organisms and present no danger to the environment.

- **Fish** LC50/Danio rerio/96 hr > 10 mg/L (OECD 203)
- **Algae :** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
- **Daphnia :** EC50/Daphnia magna/48 hr > 10 mg/L (OECD 202)
- Bioaccumulation :** Does not bioaccumulate.
- Persistence / degradability :** Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

- **Waste from residues / unused products :** In accordance with federal, state and local regulations.
- Contaminated packaging :** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

14. TRANSPORT INFORMATION

Not regulated by DOT, IATA, IMDG.

15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.

- RCRA status :** Not a hazardous waste.
- Hazardous waste number :** Not applicable
- Reportable quantity (40 CFR 302) :** Not applicable
- Threshold planning quantity (40 CFR 355)** Not applicable

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CLARIFLOC C-308P POLYMER

PAGE:	5 of 5
REVISION DATE:	09/16/2006
PRINT DATE:	12/18/2007

California Proposition 65 information :

Not applicable

HMIS & NFPA Ratings	HMIS	NFPA
Health :	1	1
Flammability :	0	0
Reactivity :	0	0
Personal Protection/Special :	B	

16. OTHER INFORMATION

Person to contact :

Regulatory Affairs Manager

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

CLARIFLOC® C-338 POLYMER

CHARACTERISTICS

CLARIFLOC C-338 polymer is a **medium** molecular weight, homopolymer of diallyldimethylammonium chloride. It is an effective organic coagulant for water and wastewater clarification in a wide variety of industrial, municipal and mining applications. CLARIFLOC C-338 can partially or totally replace alum, ferric, lime and other inorganic coagulants, thereby reducing sludge volume. Unlike inorganics, it is effective over very wide pH ranges. CLARIFLOC C-338 is **approved** by the NSF for clarification of potable water at dosages up to 50 mg/L.

TYPICAL PROPERTIES

Physical Form	Clear Amber Liquid
Density	8.67 lbs/gal
Freezing Point	25 F. (-4 C.)
Solubility	Totally Water Soluble

PREPARATION AND FEEDING

CLARIFLOC C-338 is a solution polymer which can be diluted to any convenient concentration for feeding. Fill the dilution tank with enough water to cover the mixing blades, add the desired quantity of CLARIFLOC C-338 and allow to mix while topping-off the tank with water. Totally automatic dilution equipment is available.

MATERIALS OF CONSTRUCTION

Crosslinked polyethylene, fiberglass, stainless steel and lined mild steel are the preferred materials of construction for bulk tanks. Unlined mild steel, black iron, galvanized steel, or copper are not recommended in any part of the polymer feed system. Stainless steel or PVC are the best choice for pump heads and feed lines.

MANUFACTURING SPECIFICATIONS

Specific Gravity	1.03-1.05
% Active	19.0-21.0
Product Viscosity	200-600 cPs
Product pH	5.0-7.0

HANDLING AND STORAGE

CLARIFLOC C-338 has a suggested in-plant storage life of six months in unopened drums. For best results, store at 40-90 F. Protect from freezing. If the product freezes, allow it to warm up in a heated area and thaw thoroughly before attempting to use it. For spills of CLARIFLOC C-338, sprinkle sawdust or vermiculite over the spill area and sweep the material into approved chemical disposal containers.

PRODUCT SAFETY INFORMATION

CLARIFLOC C-338 is a mildly acidic product that can irritate the skin and eyes, so gloves, rubber apron and goggles should be worn during the handling of this product. Anyone responsible for the procurement, use or disposal of this product should familiarize themselves with the appropriate safety and handling information outlined in the **POLYDYNE** Material Safety Data Sheet. In the event of an emergency with CLARIFLOC C-338, contact Chemtrec anytime day or night at (800) 424-9300.

SHIPPING

CLARIFLOC C-338 Polymer is shipped in 55 gallon, lined steel, disposable drums containing approximately 450 pounds net. It is also available in 275 gallon, poly-lined, disposable liquabins containing approximately 2400 pounds net. Bulk quantities are also available.

ADDITIONAL INFORMATION

To place an order or obtain technical information from any location in the continental United States, call toll free:

(800) 848-7659

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MATERIAL SAFETY DATA SHEET

PAGE:	1 of 5
REVISION DATE:	07/30/2002
PRINT DATE:	11/19/2002

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

CLARIFLOC® C-338 POLYMER

Supplier :

POLYDYNE INC.

PO Box 279

Riceboro, GA 31323

Tel : 800-848-7659 Fax : 912-884-8770

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation :

Cationic polymer in solution

3. HAZARDS IDENTIFICATION

Spills produce extremely slippery surfaces.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Inhalation : Move to fresh air.

Skin contact : Wash with water and soap as a precaution. In case of persistent skin irritation, consult a physician.

Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

Ingestion : The product is not considered toxic based on studies on laboratory animals.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water, water spray, foam, carbon dioxide (CO2), dry powder

Special fire-fighting precautions : Spills produce extremely slippery surfaces.

Protective equipment for firefighters : No special protective equipment required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : No special precautions required.

Environmental precautions : Do not contaminate water.

Methods for cleaning up : Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilled in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning flush away traces with water.

7. HANDLING AND STORAGE

Handling : Avoid contact with skin, eyes and clothing. When preparing the working solution ensure there is adequate ventilation. Do not breathe vapours or spray mist. When using do not smoke.

Storage : Keep in a dry, cool place (0 - 35°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls : Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Personal protection equipment

- **Respiratory protection :** In case of insufficient ventilation wear suitable respiratory equipment.
 - **Hand protection :** Rubber gloves.
 - **Eye protection :** Safety glasses with side-shields. Do not wear contact lenses.
 - **Skin protection :** Chemical resistant apron or protective suit if splashing or contact with solution is likely.
- Hygiene measures :** Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Color : amber

Odor : slight

pH : 4 - 8 for product series. See Technical Bulletin for specific value.

Melting point (°C) : Not applicable.

Flash point (°C) : >100°C

Autoignition temperature (°C) : >200°C

Bulk density : See Technical Bulletin

Water solubility : Completely miscible.

Viscosity (mPa s) : See Technical Bulletin

10. STABILITY AND REACTIVITY

- Stability :** Product is stable, No hazardous polymerization will occur.
Oxidizing agents may cause exothermic reactions.
- Hazardous decomposition products :** No decomposition if stored and applied as directed. Burning of the dried material can produce : hydrogen chloride gas, nitrogen oxides (NOx), carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

- Oral : LD50/oral/rat > 2000 mg/kg
- Dermal : The product is not considered toxic based on studies on laboratory animals.
- Inhalation : The product is not expected to be toxic by inhalation.

Irritation

- Skin : May cause skin irritation.
- Eyes : Testing conducted on rabbits showed minor transient irritation which cleared within days.

Sensitization : The product is not expected to be sensitizing.

Chronic toxicity : NOEL / Oral / rat / 90-day = 5000 mg/kg
Two-year feeding studies on rats and dogs did not reveal any adverse health effects.

Other information : Not mutagenic in AMES Test.
Not mutagenic in micronucleus test on mice.
Not teratogenic, NOEL = 175 mg/kg.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

The effects of this product on aquatic organisms are rapidly and significantly mitigated by the presence of dissolved organic carbon in the aquatic environment.

- Fish LC50/Danio rerio/96 hr > 10 mg/L (OECD 203)
- Algae : Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

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- *Daphnia* : EC50/*Daphnia magna*/48 hr > 10 mg/L (OECD 202)

Environmental fate:

LogP ow: 0

Bioaccumulation : Does not bioaccumulate.

Persistence / degradability : Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products : In accordance with federal, state and local regulations.

Contaminated packaging : Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

14. TRANSPORT INFORMATION

Not regulated by DOT.

15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.

RCRA status : Not a hazardous waste.

Hazardous waste number : Not applicable

Reportable quantity (40 CFR 302) : Not applicable

Threshold planning quantity (40 CFR 355) : Not applicable

California Proposition 65 information : Not applicable

HMIS & NFPA Ratings		NFPA
Health :	1	1
Flammability :	0	0
Reactivity :	0	0

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REVISION DATE: 07/30/2002

PRINT DATE: 11/19/2002

HMIS & NFPA Ratings		NFPA
Health :	1	1
Flammability :	1	1
Reactivity :	0	0

16. OTHER INFORMATION

Person to contact : Regulatory Affairs Manager

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for material used in combination with any other materials or in any process unless specified in the text.

CLARIFLOC® C-378 POLYMER

CHARACTERISTICS

CLARIFLOC C-378 polymer is a **high** molecular weight, homopolymer of diallyldimethylammonium chloride. It is an effective organic coagulant for water and wastewater clarification in a wide variety of industrial, municipal and mining applications. CLARIFLOC C-378 can partially or totally replace alum, ferric, lime and other inorganic coagulants, thereby reducing sludge volume. Unlike inorganics, it is effective over very wide pH ranges. CLARIFLOC C-378 is approved by the NSF for clarification of potable water at dosages up to 50 mg/L.

TYPICAL PROPERTIES

Physical Form	Amber Liquid
Density	8.59 lbs/gal
Freezing Point	-3 C.
Solubility	Totally Water Soluble

PREPARATION AND FEEDING

CLARIFLOC C-378 is a solution polymer which can be diluted to any convenient concentration for feeding. No special make-down or activation procedures are necessary. The polymer can be diluted in-line using a static mixer or in a stirred vessel. Diluting to 1-10% product is highly recommended for all clarification application because the coagulant will be distributed more efficiently into the system with less chance of overdose.

MATERIALS OF CONSTRUCTION

Crosslinked polyethylene, fiberglass, stainless steel and lined mild steel are the preferred materials of construction for bulk tanks. Unlined mild steel, black iron, galvanized steel, or copper are not recommended in any part of the polymer feed system. Stainless steel or PVC are the best choice for pump heads and feed lines.

MANUFACTURING SPECIFICATIONS

Specific Gravity	1.02 - 1.05
% Active	19.0 - 21.0
Product Viscosity	1,000 - 3,000 cPs
Product pH	5.0 - 7.0

HANDLING AND STORAGE

CLARIFLOC C-378 has a suggested in-plant storage life of six months in unopened drums. For best results, store at 40-90 F. Protect from freezing. If the product freezes, allow it to warm up in a heated area and thaw thoroughly before attempting to use it. For spills of CLARIFLOC C-378, sprinkle sawdust or vermiculite over the spill area and sweep the material into approved chemical disposal containers.

PRODUCT SAFETY INFORMATION

CLARIFLOC C-378 is a mildly acidic product that can irritate the skin and eyes, so gloves, rubber apron and goggles should be worn during the handling of this product. Anyone responsible for the procurement, use or disposal of this product should familiarize themselves with the appropriate safety and handling information outlined in the **POLYDYNE** Material Safety Data Sheet. In the event of an emergency with CLARIFLOC C-378, contact Chemtrec anytime day or night at (800) 424-9300.

SHIPPING

CLARIFLOC C-378 Polymer is shipped in 55 gallon, lined steel, disposable drums containing approximately 450 pounds net. It is also available in 275 gallon, poly-lined, disposable liquabins containing approximately 2400 pounds net. Bulk quantities are also available.

ADDITIONAL INFORMATION

To place an order or obtain technical information from any location in the continental United States, call toll free:

(800) 848-7659

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MATERIAL SAFETY DATA SHEET

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1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

CLARIFLOC C-378 POLYMER

Supplier :

POLYDYNE INC.

PO Box 279

Riceboro, Georgia 31323

Tel : 800-848-7659 Fax : 912-884-8770

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation :

Cationic polymer in solution

Chemical Name	CAS-No	Weight %
Polydiallyldimethylammonium chloride (Polydadmac)	26062-79-3	20-50

3. HAZARDS IDENTIFICATION

*Spills produce extremely slippery surfaces.**Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.*

4. FIRST AID MEASURES

Inhalation : Move to fresh air.**Skin contact :** Wash with water and soap as a precaution. In case of persistent skin irritation, consult a physician.**Eye contact :** Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.**Ingestion :** The product is not considered toxic based on studies on laboratory animals.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water, water spray, foam, carbon dioxide (CO₂), dry powder**Special fire-fighting precautions :** Spills produce extremely slippery surfaces.**Protective equipment for firefighters :** No special protective equipment required.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions :* No special precautions required.
- Environmental precautions :* Do not contaminate water.
- Methods for cleaning up :* Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilled in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

- Handling :* Avoid contact with skin, eyes and clothing. When preparing the working solution ensure there is adequate ventilation. Do not breathe vapours or spray mist. When using do not smoke.
- Storage :* Keep in a dry, cool place (0 - 35°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering controls :* Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.
- Personal protection equipment*
- *Respiratory protection :* In case of insufficient ventilation wear suitable respiratory equipment.
 - *Hand protection :* Rubber gloves.
 - *Eye protection :* Safety glasses with side-shields. Do not wear contact lenses.
 - *Skin protection :* Chemical resistant apron or protective suit if splashing or contact with solution is likely.
- Hygiene measures :* Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice:

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form :* liquid
- Color :* amber
- Odor :* slight
- pH :* 4 - 8 for product series. See Technical Bulletin for specific value.
- Melting point (°C) :* Not applicable.
- Flash point (°C) :* >100°C

Autoignition temperature (°C) : >200°C

Bulk density : See Technical Bulletin

Water solubility : Completely miscible.

Viscosity (mPa s) : See Technical Bulletin

10. STABILITY AND REACTIVITY

Stability : Product is stable, No hazardous polymerization will occur.
Oxidizing agents may cause exothermic reactions.

Hazardous decomposition products : No decomposition if stored and applied as directed. Burning of the dried material can produce : hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x).

11. TOXICOLOGICAL INFORMATION

Acute toxicity

- *Oral :* LD50/oral/rat > 2000 mg/kg
- *Dermal :* This product has been tested for cutaneous irritation on New Zealand White male rabbits according to OECD guideline 404. No effects (erythema or edema) were observed after 24 hours. Not irritating
- *Inhalation :* The product is not expected to be toxic by inhalation.

Irritation

- *Skin :* May cause skin irritation with susceptible persons
- *Eyes :* Testing conducted on rabbits showed minor transient irritation which cleared within days.

Sensitization : The product is not expected to be sensitizing.

Chronic toxicity : NOEL / Oral / rat / 90-day = 5000 mg/kg
Two-year feeding studies on rats and dogs did not reveal any adverse health effects.

Other information : Not mutagenic in AMES Test.
Not mutagenic in micronucleus test on mice.
Not teratogenic, NOEL = 175 mg/kg.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

The product is rapidly eliminated from the aquatic medium through irreversible adsorption onto suspended matter (sludge, clays, humic and other organic acids) and abiotic degradation (hydrolysis). The degradation products are practically non-toxic to aquatic organisms and present no danger to the environment.

- **Fish** LC50/Danio rerio/96 hr > 10 mg/L (OECD 203)
- **Algae :** Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
- **Daphnia :** EC50/Daphnia magna/48 hr > 10 mg/L (OECD 202)
- Bioaccumulation :** Does not bioaccumulate.
- Persistence / degradability :** Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

- Waste from residues / unused products :** In accordance with federal, state and local regulations.
- Contaminated packaging :** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local regulations.

14. TRANSPORT INFORMATION

Not regulated by DOT, IATA, IMDG.

15. REGULATORY INFORMATION

All components of this product are on the TSCA and DSL inventories.

- RCRA status :** Not a hazardous waste.
- Hazardous waste number :** Not applicable
- Reportable quantity (40 CFR 302) :** Not applicable
- Threshold planning quantity (40 CFR 355)** Not applicable

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California Proposition 65 information : Not applicable

HMIS & NFPA Ratings	HMIS	NFPA
Health :	1	1
Flammability :	0	0
Reactivity :	0	0
Personal Protection/Special :	B	

16. OTHER INFORMATION

Person to contact : Regulatory Affairs Manager

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.